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(11) EP 0 907 076 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
04.10.2000 Bulletin 2000/40

(51) Int. Cl.<sup>7</sup>: H01J 37/063, G01B 7/34,  
G01N 27/00, H02N 1/00

(43) Date of publication A2:  
07.04.1999 Bulletin 1999/14

(21) Application number: 98116809.9

(22) Date of filing: 12.05.1992

(84) Designated Contracting States:  
AT BE CH DE DK ES FR GB GR IT LI LU MC NL  
SE

(30) Priority: 14.05.1991 US 699390  
14.04.1992 US 868138

(62) Document number(s) of the earlier application(s) in  
accordance with Art. 76 EPC:  
92912228.1 / 0 584 233

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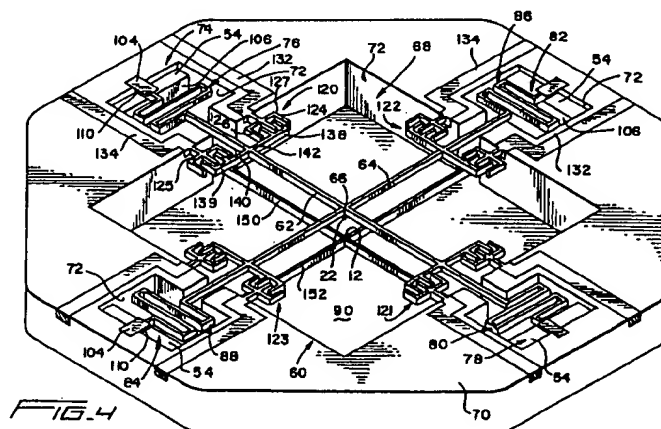
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(54) Methods of fabricating integrated, aligned tunneling tip pairs

(57) Self-aligned, opposed, nanometer dimension tips (12, 22) are fabricated in pairs, one of each pair being located on a movable (24) single crystal beam, with the beam being movable in three dimensions with respect to a substrate (18) carrying the other tip (12) of a pair. Motion of one tip with respect to the other is controlled or sensed by transducers (120, 122, 124, 126) formed on the supporting beams (62, 64). Spring

means (76, 80, 86, 88) in each beam allow axial motion of the beam. The tips (12, 22) and beams (62, 64) are fabricated from single crystal silicon substrate (18) and the tips (12, 22) may be electrically isolated from the substrate (18) by fabricating insulating segments (40, 54) in the beam structure.



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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 11 6809

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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>15 August 2000</b>	Examiner <b>Clevorn, J</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.92 (P4/C01)



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Application Number  
EP 98 11 6809

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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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